

DeltaLab **DL-2** **- ACOUSTICOMPUTER® -**



A true stereo (2 channel) delay and special effects unit with highly musical sound quality and extremely flexible versatility.

- 16 Reverb programs
- 2 Independent pre-reverb delays
- VCO sinusoidal with 4:1 frequency range
- Sustain - non-deteriorating repeat with selectable updating
- Long delays - up to 252 ms (serial mode) for special effects
- Short delays - down to 0.25 ms for flanging effects
- Positive and negative reverb and flanging feedback
- Stereo imaging on input to extract hidden ambience
- Stereo imaging on output for left-right shifting
- Foot switch bypass control
- External memory expansion capability

HIGH QUALITY DIGITAL DELAY PROCESSING IS NOW AVAILABLE

DeltaLab introduces the ACOUSTICOMPUTER®, a flexible and rugged all-electronic "space machine" with highly musical sound quality and a surprisingly modest price.

The ACOUSTICOMPUTER is a combination digital delay and special effects processor designed for use both on stage and in the studio, providing well-known functions (echo, doubling, vibrato, flanging, etc.) plus some new effects not available in any other device.

PERFORMANCE FEATURES

- 2 Independent delay channels
- Delay lengths from 0.25 ms to 252 ms
- Frequency response 20 to 15 kHz at all delay lengths
- Dynamic range greater than 90 dB
- No audible distortion (1 kHz THD < 0.2%)
- 16 Inter-channel related reverb programs
- Foot pedal controlled bypass
- Variable time base with VCO
- Stereo imaging input and output controls

FOR STUDIO

The ACOUSTICOMPUTER is a compact, highly versatile true stereo delay line incorporating feedback and equalization circuitry. In one package, the DL-2 contains what would have previously required a rack full of outboard equipment. And the ACOUSTICOMPUTER maintains DeltaLab's no-compromise reputation -- full 20-15 kHz bandwidth, large dynamic range and virtually no audible distortion.

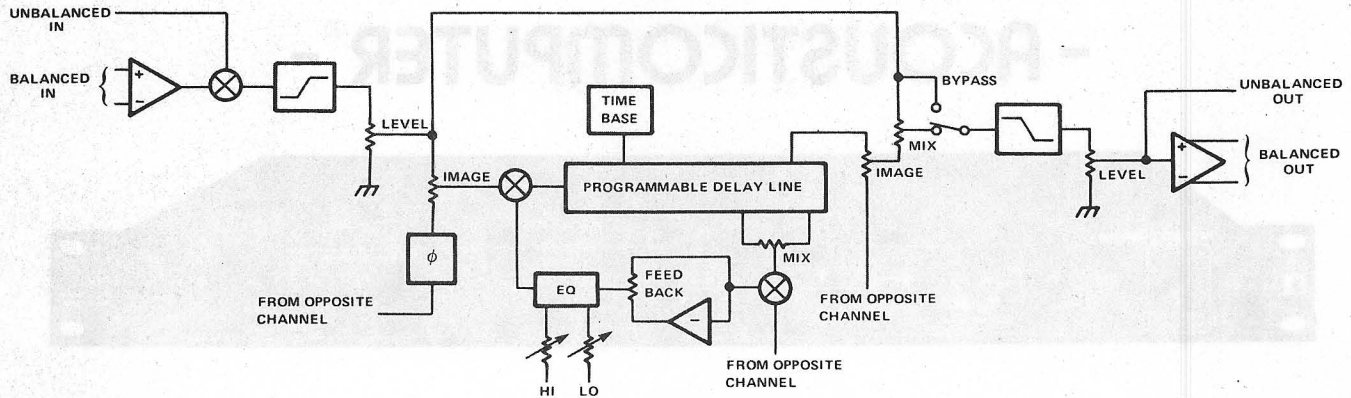
FOR THE PERFORMING MUSICIAN

Today's musician knows the problem of trying to recreate studio effects during a live performance. The DL-2 provides this versatility in one easy to understand, reliable unit. Footswitch bypass and external VCO inputs give musicians the option to "pre-select" an effect and also modulate the effect via the external input.

OPTIONAL MEMORY MODULE

Prior to the ACOUSTICOMPUTER, long delay times have been available only at the expense of dynamic range and/or bandwidth degradation. DeltaLab again chooses the no-compromise alternative by offering an external memory module with a maximum of two seconds of delay per module. Now delay lengths are limited only by the number of modules added; signal quality is not compromised at all!

DeltaLab ACOUSTICOMPUTER - DL-2



Block Diagram - ACOUSTICOMPUTER (One Channel Only)

SPECIFICATIONS

Delay Range	Parallel Mode 0.5 to 160 ms Ch A 0.25 to 92 ms Ch B	Serial Mode 0.5 to 160 ms Ch A 0.75 to 252 ms Ch A & B
Frequency Response ¹ (@ -14 dB) +1, -3 dB	20 to 15k Hz	
Dynamic Range ¹ A-Weighted	(X1 Delay factor) 90 dB min	(X4 Delay factor) 85 dB min
C-Weighted (Broadband)	85 dB min	80 dB min
Headroom above 0 dB	6 dB	
Equivalent Pre-emphasis	50μs	
THD (Distortion Plus Noise) ^{1 2}		
Ref 1 kHz	(X1 Delay factor)	(X4 Delay factor)
0 dB	0.2% max	0.4% max
-10 dB	0.2% max	0.4% max
-20 dB	0.3% max	0.6% max
-30 dB	0.5% max	0.8% max
-40 dB	0.8% max	1.0% max
Inputs		
Balanced (XLR)	0 to 18 dBm	
Unbalanced (Phone)	0 to 18 dBm	
Impedance	47K ohm	
Outputs		
Balanced (XLR)	Up to 24 dBm	
Unbalanced (Phone)	Up to 18 dBm	
Impedance	600 ohms	
Time Base Generator		
Delay Factor	Continuous from X1 to X4	
VCO Depth	0 to 100% of Delay Adjustment Range (4:1)	
VCO Rate	Sinusoidal from 0 to greater than 10 Hz	
Sustain	Repeats signal in memory indefinitely without degradation. Sample mode is used to update with new information at rate determined by the VCO.	
Reverberation	16 Programs displayed via binary weighted LED's. Most programs consist of high echo densities.	
Size	1½ x 19 x 10 in. (4.45 x 48.3 x 25.4 cm)	
Shipping Weight	12 lbs (5.5 kg)	

¹ Straight Delay Mode

² With C-Weighted Broadband Filter

Manufacturer reserves the right to make improvements without obligation.



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